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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Henry Nita

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EXAMINER

POUS, NATALIE R

ART UNIT

PAPER NUMBER

3731

DATE MAILED: 08/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.		Applicant(s)	
	10/722,209		NITA ET AL.	
	Examiner		Art Unit	
	Natalie Pous		3731	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 April 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) 33-40 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|----------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>3/12/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

Claims 33-40 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 4/25/06. Applicant's election without traverse of apparatus (claims 1-32) in the reply filed on 4/25/06 is acknowledged.

Priority

If applicant desires to claim the benefit of a prior-filed application under 35 U.S.C. 119(e) or 120, a specific reference to the prior-filed application in compliance with 37 CFR 1.78(a) must be included in the first sentence(s) of the specification following the title or in an application data sheet. For benefit claims under 35 U.S.C. 120, 121 or 365(c), the reference must include the relationship (i.e., continuation, divisional, or continuation-in-part) of the applications.

If the instant application is a utility or plant application filed under 35 U.S.C. 111(a) on or after November 29, 2000, the specific reference must be submitted during the pendency of the application and within the later of four months from the actual filing date of the application or sixteen months from the filing date of the prior application. If the application is a utility or plant application which entered the national stage from an international application filed on or after November 29, 2000, after compliance with 35 U.S.C. 371, the specific reference must be submitted during the pendency of the application and within the later of four months from the date on which the national stage

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commenced under 35 U.S.C. 371(b) or (f) or sixteen months from the filing date of the prior application. See 37 CFR 1.78(a)(2)(ii) and (a)(5)(ii). This time period is not extendable and a failure to submit the reference required by 35 U.S.C. 119(e) and/or 120, where applicable, within this time period is considered a waiver of any benefit of such prior application(s) under 35 U.S.C. 119(e), 120, 121 and 365(c). A benefit claim filed after the required time period may be accepted if it is accompanied by a grantable petition to accept an unintentionally delayed benefit claim under 35 U.S.C. 119(e), 120, 121 and 365(c). The petition must be accompanied by (1) the reference required by 35 U.S.C. 120 or 119(e) and 37 CFR 1.78(a)(2) or (a)(5) to the prior application (unless previously submitted), (2) a surcharge under 37 CFR 1.17(t), and (3) a statement that the entire delay between the date the claim was due under 37 CFR 1.78(a)(2) or (a)(5) and the date the claim was filed was unintentional. The Director may require additional information where there is a question whether the delay was unintentional. The petition should be addressed to: Mail Stop Petition, Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

If the reference to the prior application was previously submitted within the time period set forth in 37 CFR 1.78(a), but not in the first sentence(s) of the specification or an application data sheet (ADS) as required by 37 CFR 1.78(a) (e.g., if the reference was submitted in an oath or declaration or the application transmittal letter), and the information concerning the benefit claim was recognized by the Office as shown by its inclusion on the first filing receipt, the petition under 37 CFR 1.78(a) and the surcharge under 37 CFR 1.17(t) are not required. Applicant is still required to submit the reference

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in compliance with 37 CFR 1.78(a) by filing an amendment to the first sentence(s) of the specification or an ADS. See MPEP § 201.11.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 23-25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 23-25 recites the limitation "the guidewire contacts" in line 1 of each. There is insufficient antecedent basis for this limitation in the claim. It is noted that claim 20 states "wherein the guidewire tube includes at least one opening within the catheter body for providing contact between a guidewire extending through the guidewire tube and the ultrasound transmission member," which is positively claiming the opening in the tube, but not the contact between the guidewire and the ultrasound transmission. As currently stated, the contact between the members is functional recitation, and therefore does not provide proper antecedent basis for claims 23-25 positively stating the contacting orientation.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 4, 8, 12-15, 20-22 and 32 are rejected under 35 U.S.C. 102(b) as being anticipated by Brennan et al (US 6450975).

Regarding Claim 1, Brennan teaches an ultrasound catheter for disrupting occlusions in blood vessels which can be guided from an access site on a patient's body to a target site adjacent an occlusion, the ultrasound catheter comprising: an elongate flexible catheter body (102) having a proximal portion, a distal portion (fig. 4) and at least one lumen (130), wherein the proximal portion is stiffer than the distal portion, and the distal portion is more flexible near a distal end of the catheter body than near the proximal portion of the catheter body (Column 8, proximate lines 19-27); an ultrasound transmission member (114) extending longitudinally through the lumen of the catheter body (fig. 5) and having a proximal end and a distal end, wherein the ultrasound transmission member is more flexible near its distal end than near its proximal end (Column 8, lines 13-21); a distal head (124) coupled with the distal end of the ultrasound transmission member (114) and disposed adjacent the distal end (126) of the catheter body (fig. 5); and at least one coupling member (106) for coupling the ultrasound transmission member with a source of ultrasound energy.

Regarding Claim 4, Brennan teaches an ultrasound catheter as in claim 1, wherein cross-sectional diameter of the catheter body is less along the distal portion than along the proximal portion, and wherein a cross-sectional diameter of the

ultrasound transmission wire is less near the distal end than near the proximal end (fig. 5).

Regarding Claim 8, Brennan teaches an ultrasound catheter for disrupting occlusions in blood vessels which can be guided along a guidewire from an access site on a patient's body to a target site adjacent an occlusion, the ultrasound catheter comprising: an elongate flexible catheter body (102) having a proximal portion, a distal portion and at least one lumen (130), wherein the proximal portion has a larger cross-sectional diameter than the distal portion (Column 8, proximate lines 19-27), the proximal portion is sufficiently stiff to push the distal portion through a blood vessel having at least one bend, and the distal portion is sufficiently flexible to pass through the bend in the blood vessel (Column 7, proximate lines 58-67); an ultrasound transmission member (114) extending longitudinally through the lumen of the catheter body and having a proximal end and a distal end, wherein a cross-sectional diameter of the ultrasound transmission member is less near its distal end than near its proximal end (fig. 5), and a distal portion of the ultrasound transmission member is sufficiently flexible to pass through the bend in the blood vessel (Column 7, proximate lines 58-67); a distal head (124) coupled with the distal end of the ultrasound transmission member and disposed adjacent the distal end of the catheter body; and at least one coupling member (106) for coupling the ultrasound transmission member with a source of ultrasound energy.

Regarding Claim 12, Brennan teaches an ultrasound catheter for disrupting occlusions in blood vessels which can be guided along a guidewire from an access site

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on a patient's body to a target site adjacent an occlusion, the ultrasound catheter comprising: an elongate flexible catheter body (102) having a proximal portion, a distal portion and at least one lumen, wherein the proximal portion is stiffer than the distal portion, and the distal portion is more flexible near a distal end of the catheter body than near the proximal portion of the catheter body (Column 8, proximate lines 19-27); an ultrasound transmission member (114) extending longitudinally through the lumen of the catheter body and having a proximal end and a distal end, wherein the ultrasound transmission member is more flexible near its distal end than near its proximal end (Column 8, proximate lines 19-27), and wherein the distal portion of the catheter body and the ultrasound transmission member are sufficiently flexible to conform concomitantly with at least one bend in a guidewire extended through the at least one lumen (Column 7, proximate lines 58-67); a distal head (124) coupled with the distal end of the ultrasound transmission member and disposed adjacent the distal end of the catheter body; and at least one coupling member (106) for coupling the ultrasound transmission member with a source of ultrasound energy.

Regarding Claim 13, Brennan teaches an ultrasound catheter as in claim 12, wherein the distal portion of the catheter body and the ultrasound transmission wire are sufficiently flexible to conform concomitantly to multiple bends in the guidewire (Column 7, proximate lines 58-67).

Regarding Claim 14, Brennan teaches an ultrasound catheter as in claim 13, wherein the distal portion of the catheter body and the ultrasound transmission member

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are sufficiently flexible to conform concomitantly to multiple bends in a blood vessel guidewire (Column 7, proximate lines 58-67).

Regarding Claim 15, Brennan teaches an ultrasound catheter as in claim 14, wherein the distal portion of the catheter body, the ultrasound transmission wire and the guidewire may be passed together or sequentially through the multiple bends in the blood vessel while conforming concomitantly to the multiple bends (Column 10, proximate lines 8-34).

Regarding Claim 20, Brennan teaches an ultrasound catheter for disrupting occlusions in blood vessels which can be guided from an access site on a patient's body to a target site adjacent an occlusion, the ultrasound catheter comprising: an elongate flexible catheter body (102) having a proximal portion, a distal portion, at least one lumen (130), and a guidewire tube (142) disposed within the lumen, wherein the proximal portion is stiffer than the distal portion (Column 8, proximate lines 19-27); an ultrasound transmission member (114) extending longitudinally through the lumen of the catheter body; a distal head (124) coupled with the distal end of the ultrasound transmission member and disposed adjacent the distal end of the catheter body (fig. 5); and at least one coupling member (106) for coupling the ultrasound transmission member with a source of ultrasound energy; wherein the guidewire tube includes at least one opening within the catheter body for providing contact between a guidewire extending through the guidewire tube and the ultrasound transmission member (fig. 5, see proximal portion).

Regarding Claim 21, Brennan teaches an ultrasound catheter as in claim 20, wherein the distal portion of the catheter body is more flexible near a distal end of the catheter body than near the proximal portion of the catheter body (Column 8, proximate lines 19-27).

Regarding Claim 22, Brennan teaches an ultrasound catheter as in claim 20, wherein the ultrasound transmission member comprises a proximal end and a distal end, and wherein the ultrasound transmission member is more flexible near its distal end than near its proximal end (Column 8, proximate lines 19-27).

Regarding Claim 32, Brennan teaches an ultrasound catheter for disrupting occlusions in blood vessels which can be guided from an access site on a patient's body to a target site adjacent an occlusion, the ultrasound catheter comprising: an elongate flexible catheter body (102) having a proximal portion, a distal portion and at least one lumen (130), wherein the proximal portion is stiffer than the distal portion, and the distal portion is more flexible near a distal end of the catheter body than near the proximal portion of the catheter body (Column 8, proximate lines 19-27); an ultrasound transmission member extending longitudinally through the lumen of the catheter body and having a proximal end and a distal end, wherein the ultrasound transmission member is more flexible near its distal end than near its proximal end (Column 8, proximate lines 19-27); a distal head (124) coupled with the distal end of the ultrasound transmission member and disposed adjacent the distal end of the catheter body (fig. 5); and at least one coupling member (106) for coupling the ultrasound transmission member with a source of ultrasound energy, the at least one coupling member

comprising a housing fixedly coupled with the proximal end of the catheter body (fig. 4) such that torque applied to the housing is transmitted along the catheter body to its distal portion.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2, 3, and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brennan in view of Bencini et al. (US 6544215).

Brennan teaches all limitations of preceding dependent claims 1, 8 and wherein the catheter body is intended for navigation through tortuous blood vessels

Brennan further teaches the following:

- an elongate flexible catheter body (102) having a proximal portion, and at least one lumen (130), wherein the proximal portion is stiffer than the distal portion, and the distal portion is more flexible near a distal end of the catheter body than near the proximal portion of the catheter body (Column 8, proximate lines 19-27); an ultrasound transmission member extending longitudinally through the lumen of the catheter body and having a proximal end and a distal end, wherein the ultrasound transmission member is more flexible near its distal end than near its proximal end (Column 8, proximate lines 19-27), and wherein the distal portion of the catheter body and the ultrasound transmission member are sufficiently

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flexible to conform concomitantly to at least one bend in a guidewire extended through the at least one lumen; a distal head (124) coupled with the distal end of the ultrasound transmission member and disposed adjacent the distal end of the catheter body; and at least one coupling member (106) for coupling the ultrasound transmission member with a source of ultrasound energy.

- wherein the distal portion of the catheter body and the ultrasound transmission wire are sufficiently flexible to conform concomitantly to multiple bends in the guidewire (Column 7, proximate lines 58-67).
- wherein the distal portion of the catheter body and the ultrasound transmission member are sufficiently flexible to conform concomitantly to multiple bends in a blood vessel (Column 7, proximate lines 58-67).
- wherein the distal portion of the catheter body, the ultrasound transmission wire and the guidewire may be passed together or sequentially through the multiple bends in the blood vessel while conforming concomitantly to the multiple bends (Column 10, proximate lines 8-34).

Brennan fails to teach the following:

- wherein the distal portion is sufficiently flexible to pass, without kinking, through at least 5 cm of a blood vessel having at least one bend and an inner diameter of between about 2 mm and about 5 mm
- wherein the at least one bend has a radius of about 1.0 cm or smaller
- a distal portion having at least one bend

Bencini et al teach a steer able catheter wherein the distal portion has a bend and is sufficiently flexible to pass, without kinking, through at least 5 cm of a blood vessel having at least one bend and an inner diameter of between about 2 mm and about 5 mm wherein the at least one bend has a radius of about 1.0 cm or smaller (column 5, proximate lines 55-67) in order to bend through tortuous blood vessels, and yet have sufficient memory to return to its original orientation when bending forces are removed. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of Brennan with the dimensions as disclosed by Bencini in order to bend through tortuous blood vessels, and yet have sufficient memory to return to its original orientation when bending forces are removed.

Claims 6 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brennan in view of Ferrera et al. (US 6616617).

Brennan teaches all limitations of preceding dependent claims 1, 4 and 8 but fails to teach wherein a wall thickness of the catheter body is less along the distal portion than along the proximal portion. Ferrera teaches a catheter for vascular navigation wherein the wall thickness of the catheter may vary to provide desired variations in bending or stiffness of the device. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of Brennan with a catheter of varied thickness in order to further enhance the stiffness of the proximal end and the flexibility of the distal end.

Claims 26-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brennan in view of Mahurkar (US 5221255).

Brennan teaches an ultrasound catheter for disrupting occlusions in blood vessels which can be guided from an access site on a patient's body to a target site adjacent an occlusion, the ultrasound catheter comprising:

- an elongate flexible catheter body (102) having a proximal portion, a distal portion and at least one lumen, wherein the proximal portion is stiffer than the distal portion (Column 8, proximate lines 19-27);
- an ultrasound transmission member (114) extending longitudinally through the lumen of the catheter body;
- a distal head (124) coupled with the distal end of the ultrasound transmission member and disposed adjacent the distal end of the catheter body (fig. 5), the distal head including: a guidewire aperture (140); and a guidewire lumen (fig. 5) extending through the distal head, the guidewire lumen having a different longitudinal axis than a longitudinal axis of the catheter body;
- at least one coupling member (106) for coupling the ultrasound transmission member with a source of ultrasound energy.
- distal portion of the catheter body is more flexible near a distal end of the catheter body than near the proximal portion of the catheter body (Column 8, proximate lines 19-27).
- wherein the ultrasound transmission member comprises a proximal end and a distal end, and wherein the ultrasound transmission member is more flexible near its distal end than near its proximal end (Column 8, proximate lines 19-27).

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- wherein the guidewire lumen includes a cavity in which a distal end of a guidewire tube of the catheter body is disposed (128).
- wherein the cavity extends through the distal end of the distal head, such that the distal end of the guidewire tube is flush with the distal end of the distal head (fig. 5).
- wherein the cavity extends partially through the distal head, such that the distal end of the guidewire tube is disposed proximal to the distal end of the distal head (fig. 6).

Brennan fails to disclose wherein the guidewire aperture is in a center of a distal end of the distal head. Mahurkar teaches a lumen (14) is off the longitudinal axis of the catheter, wherein the distal aperture of the lumen is in the center distal end of the catheter (fig. 2) in order to provide a smoothly tapered distal most portion. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of Brennan with a lumen aperture in the center of the distal end in order to provide a smoothly tapered distal most portion.

Claims 5, 7 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brennan and Ferrera and further as a matter of design choice. The combination of Brennan and Ferrera teaches all limitations of preceding dependent claims 1, 4, 6, 8 and 10 as previously described, but does not teach:

- wherein the cross-sectional diameter of the catheter body is between about 0.102 cm and about 0.178 cm along its proximal end and between about 0.076 cm and about 0.127 cm along its distal end

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- the cross-sectional diameter of the ultrasound transmission member is between about 0.051 cm and about 0.102 cm near its proximal end and between about 0.013 cm and about 0.038 cm near its distal end.
- wherein the wall thickness is between about 0.007 cm to about 0.020 cm along its proximal portion and about 0.005 cm to about 0.013 cm along its distal portion.
- wherein the wall thickness is between about 0.007 cm to about 0.020 cm along its proximal portion and about 0.005 cm to about 0.013 cm along its distal portion.

The combination of Brennan and Ferrera does teach a catheter system for navigating through bends in the vascular system, and it appears that the combination of Brennan and Ferrera performs the task of navigating through bends in the vascular system by providing a more rigid proximal section and a more flexible distal section equally well as that of the application. It would therefore have been an obvious matter of design choice to provide the dimensions as disclosed in the application since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

Claims 20 and 23-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Passafaro et al. (US 5474530) in view of Brennan and further as a matter of design choice.

Passafaro teaches an ultrasound catheter for disrupting occlusions in blood vessels which can be guided from an access site on a patient's body to a target site adjacent an occlusion, the ultrasound catheter comprising: an elongate flexible catheter body (14) having a proximal portion, a distal portion, at least one lumen (58), and a guidewire tube (90) disposed within the lumen (fig. 5), an ultrasound transmission member (28) extending longitudinally through the lumen of the catheter body; a distal head (104) coupled with the distal end of the ultrasound transmission member and disposed adjacent the distal end of the catheter body (fig. 5); and at least one coupling member (40) for coupling the ultrasound transmission member with a source of ultrasound energy; wherein the guidewire tube includes at least one opening (92) within the catheter body for providing contact between a guidewire extending through the guidewire tube and the ultrasound transmission member (fig. 5). Passafaro further teaches wherein the guidewire contacts the ultrasound transmission wire nearer a proximal end of the catheter body than the distal end of the catheter body.

Passafaro fails to teach wherein the proximal portion of the catheter body is stiffer than the distal portion. Brennan teaches a ultrasonic catheter system wherein the proximal portion of the catheter body is stiffer than the distal portion (Column 8, proximate lines 19-27) in order to provide increased steerability yet flexibility to the device. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of Passafaro with a stiffer proximal portion of the catheter body in order to provide increased steerability yet flexibility to the device.

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The combination of Passafaro and Brennan fail to teach wherein the guidewire contacts the ultrasound transmission wire nearer to the distal end and nearer to the center of the catheter body. It would have been an obvious matter of design choice to position the aperture (92, Passafaro) nearer to the center or distal end of the device since it has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japikse*, 86 USPQ 70.

Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Natalie Pous whose telephone number is (571) 272-6140. The examiner can normally be reached on Monday-Friday 8:00am-5:30pm, off every 2nd Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anhtuan Nguyen can be reached on (571) 272-4963. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

NRP
6/20/06



(JACKIE) TAN-UYEN HO
PRIMARY EXAMINER
6/23/06